## Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

## Listing of Claims:

1.    (currently amended) A method for merging a pair of overlapping two-dimensional (2D) images, ~~said~~ wherein the images ~~being~~ comprise projections of a single three-dimensional (3D) scene, said method comprising:

selecting at least four feature points in the 3D scene,

finding ~~the~~ 2D ~~coordinate~~ coordinates of ~~the~~ points in both images corresponding to the selected feature points, the 2D coordinates being found with respect to original coordinate systems in the two images,

translating the original coordinate systems of the two images ~~in order~~ to substantially minimize ~~the~~ average coordinate ranges of the 2D coordinates found,

determining ~~the~~ parameters of a substantially optimal projective transformation relating ~~the~~ corresponding translated coordinates in the two ~~image~~ images,

determining ~~the~~ parameters of the projective transformation for application in the ~~untranslated~~ non-translated original coordinate systems of the two images by altering the projective transformation parameters in the translated coordinate systems using translation vectors that ensure an equivalence of the projective transformation in the original and translated coordinate systems is true, and

merging the two images into a composite image by transforming one image according to the projective transformation into a transformed image and combining the transformed image with the other image.

2.    (currently amended) The method of claim 1, wherein ~~the step of~~ selecting ~~further~~ comprises ~~automatic selection of~~ automatically selecting feature points with sufficient surrounding structure for ~~accurate~~ accurately matching of the corresponding 2D

coordinates in the two images.

3.      (currently amended) The method of claim 1, wherein ~~the step of~~ translating ~~further~~ comprises determining ~~the~~ a translation for each image as ~~the~~ an average of the 2D coordinates in ~~that~~ the respective image.

4.      (currently amended) The method of claim 1, wherein ~~the step of~~ determining the projective ~~translation~~ transformation parameters ~~further~~ of the substantially optimal projective transformation in the translated coordinate system comprises performing a singular value decomposition.

5.      (currently amended) The method of claim 1, wherein ~~the step of~~ determining the projective ~~translation~~ transformation parameters ~~further~~ of the substantially optimal projective transformation in the translated coordinate system comprises performing a minimization of an error function.

6.      (currently amended) An apparatus for merging a pair of overlapping two-dimensional (2D) images, said images being projections of a single three-dimensional (3D) scene, said apparatus comprising:
        means for obtaining a pair of 2D images,
        a processor responsive to the means for obtaining images and configured to perform the method of claim 1, and
        a display for viewing the pair of images merged by the processor.

7.      (currently amended) The apparatus of claim 6, wherein the means for obtaining images ~~further~~ comprises a digital camera.

8.      (currently amended) The apparatus of claim 6, wherein the means for obtaining

images ~~further~~ comprises an x-ray apparatus.

9.    (currently amended) The apparatus of claim 6, wherein the means for obtaining images ~~further~~ comprises a network connection across which the images are received.

10.    (currently amended) The apparatus of claim 6, wherein the processor ~~further~~ comprises means for reading a computer readable medium.

11.    (currently amended) An x-ray apparatus for merging a pair of overlapping two-dimensional (2D) images, ~~said~~ <u>wherein the</u> images ~~being~~ <u>comprise</u> projections of a single three-dimensional (3D) scene, said apparatus comprising:

    an x-ray source for projecting a beam of x-rays through an object to be examined,

    an x-ray detector for obtaining digital x-ray images which are projections of the object,

    a processor responsive to pairs of overlapping x-ray images obtained by the x-ray detector and configured to perform the method of claim 1, <u>and</u>

    a display for viewing the pair of images merged by the processor.

12.    (currently amended) The apparatus of claim ~~10~~ <u>11,</u> further comprising<u>:</u>

    means for jointly moving the x-ray source and the x-ray detector for rotation about at least one axis or motion along at least one direction.

13.    (original) A computer readable medium comprising encoded program instructions for causing a processor to perform the method of claim 1.